

1. (Amended) A quantization method in which quantization processing is applied to data for first and second recording means which record input image data in a plurality of gradations which belong to each of different gradations in substantially the same hue, comprising the steps of:

inputting multi-value level image data;

a first quantization step of performing quantization of the image data input for the first recording means to data with a lower level than that of the input image data, the first quantization step performing the quantization by conducting error correction; and

a second quantization step of performing quantization of the image data input for the second recording means to data with a lower level than that of the input image data, the second quantization step performing the quantization without conducting error correction,

wherein at least one of the first and second quantization steps performs quantization of the input image data to multi-value data with 3 or more levels, so that the corresponding one of the first and second recording means may record the image in a plurality of gradations.

2. (Amended) A recording apparatus which includes first and second recording means which record input image data in a plurality of gradations which belong to each of different gradations in substantially the same hue, comprising:

input means for inputting multi-value level image data;

first quantization means for performing quantization of the image data input for the first recording means to a data with a lower level than that of the input image data,

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the first quantization means performing the quantization by conducting error correction;  
and

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second quantization means for performing quantization of the image data  
input for the second recording means to a data with a lower level than that of the input  
image data, the second quantization means performing the quantization without conducting  
error correction,

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wherein the first and second recording means record the input image data  
respectively in first and second gradations according to a quantization result from the first  
quantization means, at least one of the first and second quantization means performs  
quantization of the input image data to multi-value data with 3 or more levels and the  
corresponding one of the first and second recording means record the image in a plurality  
of gradations.

3. (Not Changed From Prior Version) The recording apparatus according  
to claim 2, wherein the first and second recording means record the image by an ink-jet  
system in which recording is effected by attaching an ink drop onto a recording medium.

4. (Not Changed From Prior Version) The recording apparatus according  
to claim 3, wherein the first and second recording means record the image with light ink  
and black ink.

5. (Not Changed From Prior Version) The recording apparatus according to claim 4, wherein a size of the ink drop is controlled when the first and second recording means effect recording in a plurality of gradations.

6. (Not Changed From Prior Version) The recording apparatus according to claim 2, wherein not only recording is executed by using both of the first and second recording means according to a level of the input image data, but the first and second recording means share a region in which both means effect recording while both raising recording levels.

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7. (Amended) A storage medium from which a computer can readout a control program which is used for performing quantization of data for first and second recording means which record input image data in a plurality of gradations which belong to each of different gradations in substantially the same hue, comprising:

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a first quantization step module for performing quantization of the image data input for the first recording means to data with a lower level than that of the input image data, the first quantization step performing the quantization by conducting error correction;

a second quantization step module for performing quantization of the image data input for the second recording means to data with a lower level than that of the input image data, the second quantization step performing the quantization without conducting error correction; and

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an output step module for outputting results from the first and second quantization steps, wherein one of the first and second quantization step modules perform quantization of the input image data to multi-value data with 3 or more levels so that the corresponding one of the first and second recording means may record the image in a plurality of gradations.

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8. (New) The quantization method according to Claim 1, wherein in said first quantization step, quantization of the image data is performed by using an error diffusion method, and in said second quantization step, quantization of the image data is performed by using a dither method.

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9. (New) The recording apparatus according to Claim 2, wherein quantization of the image data by the first quantization means is performed by using an error diffusion method, and quantization of the image data by the second quantization means is performed by using a dither method.

10. (New) The storage medium according to Claim 7, wherein in said first quantization step, quantization of the image data is performed by using an error diffusion method, and in said second quantization step, quantization of the image data is performed by using a dither method.

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